

A SALVAGE AND TRANSLOCATION PLAN

FOR THE

POLSELLI PROPERTY

REZ 08-002

County of San Diego

Prepared for

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Prepared for Submittal to the County of San Diego

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1. DESCRIPTION OF THE IMPACT SITE FOR WHICH SALVAGE AND TRANSLOCATION IS REQUIRED

1.1 Responsible Parties

The REZ 08-002 property is the site for which salvage and translocation is required. The property owner (Dictionary Hill Developers, L.P.) is currently responsible for mitigation associated with the REZ 08-002 project site, including salvage and translocation of Coast Barrel Cactus. This responsibility for this salvage and translocation shall transfer to any subsequent owner(s) of the property once the REZ 08-002 project has been approved.

1.2 Location of the Project

The REZ 08-002 project site (APNs 584-200-36, -66, -67, & -70-78) is located in the La Presa community of unincorporated San Diego County, south of San Carlos Street and bounded on the east and west by the proposed future extensions of La Presa Avenue and Maria Avenue, respectively (Figure 1). The property can be found on page 1291 of the Thomas Guide for San Diego County. Specifically, the project site is located at 32°42'15"N and 116°59'37"W.

1.3 Summary of Overall Project with Proposed Mitigation

1.3.1 Current Environmental Setting and Site Conditions

In September of 2006, the approximately 1.56-acre REZ 08-002 project site was surveyed for biological resources by the author and Julia L. Groebner, Associate Biologist. Mr. Scheidt and Ms. Groebner conducted additional surveys of the site and adjoining offsite areas in April and May of 2010. A prior biological survey of this site was completed by Affinis in 1990 (*Biological Survey Report for the Polselli Property, L-1979, Log No. 90-19-1*). The results of these studies can be found in Attachment B, "Biological Resources, Project Impacts, and Mitigation: The Polselli Property, REZ 08-002, La Presa" (Scheidt, 2010).

The property slopes gently to the south towards the Sweetwater Reservoir, which is located approximately 0.17 mile to the south. Elevations onsite range between approximately 277 and 328 feet MSL. Access to the property is from the ends of Maria and La Presa Avenues. Two of the lots that comprise the REZ 08-002 project site are currently developed (lots 70 and 36) with houses and patios, although the remaining ten are in a mostly natural state (undeveloped). Currently, the property supports Diegan Coastal Sage Scrub (Holland Code 32500), Disturbed Habitat (Holland Code 11300), and Urban/Developed Habitat (Holland Code 12000). Forty-two species of vascular plants and forty species of vertebrate animals were detected during the various field surveys of the REZ 08-002 site. Three sensitive plants and one sensitive animal were detected during the 2006 field survey. These are San Diego County Needle Grass, Coast Barrel Cactus, San Diego County Vigiera, and

California Gnatcatcher. An additional two sensitive animal species were reported from the site in 1990. These are San Diego Cactus Wren and Bewick's Wren. Other sensitive animals might be anticipated to occur onsite, at least on an occasional basis, but were undetected during the surveys.

It should be noted that, in 1991, Mr. Fred Sproul removed all specimens of Coast Barrel Cactus (*Ferocactus viridescens*) from the western half of the REZ 08-002 project site for salvage and transfer to the Tree of Life Nursery in San Juan Capistrano. This removal was in response to the requirements entailed in the letter of May 21, 1991 for L1979, Log No. 90-91-1. This salvage effort explains why no specimens of this species currently remain on western half of the subject property.

To the north, northeast, and west the site adjoins single family residential development. To the south and southeast are relatively undisturbed areas, including the Sweetwater Reservoir. Open lands lie between the site and the reservoir, although a Caltrans right-of-way for the future construction of SR 54 is present immediately to the south of the REZ 08-002 project site.

1.3.2 Project Impacts

The REZ 08-002 project proposes grading for construction of the extensions of Maria Avenue and La Presa Avenue from their respective intersections with San Carlos Street and grading associated with development of ten of the twelve lots that comprise the site (APN 584-200-66, -67, & -71–78). Homes are currently proposed for eight of the undeveloped lots; the other two will be developed with turnarounds for the extensions of Maria Avenue and La Presa Avenue. It is anticipated that development of the REZ 08-002 project site will result in the removal of all native vegetation from the property. This would result in impacts to 0.25 acre of Diegan Coastal Sage Scrub. An additional 0.91 acre of Disturbed Habitat and 0.09 acre of Urban/Developed Habitat would also be impacted by the project. Offsite fire clearing to the east will impact approximately 0.06 acre of Diegan Coastal Sage Scrub. However, habitat impacts are not the subject of this Salvage and Translocation Plan, as it is focused on the need for species-specific mitigation.

Approximately 30 mature Coast Barrel Cactus specimens are present on the eastern half of the REZ 08-002 property. An additional 15 specimens are present immediately to the south of the project site within the Caltrans right-of-way. Approximately 14 specimens are present offsite to the east within the offsite fire clearing area. The approximately 30 Coast Barrel Cactus specimens found onsite plus 14 specimens offsite to the east would be impacted by the project in the absence of the salvage and translocation program detailed by this plan.

2. GOALS OF THE SALVAGE AND TRANSLOCATION PROGRAM

The goal of the salvage and translocation program detailed in this plan is to preserve biotic resources that would

otherwise be lost during site development, namely, approximately 44 Coast Barrel Cactus specimens. The goal of this plan, therefore, is to provide detailed salvage and translocation methodologies to ensure the success of the operation. This includes the specific specimens to be conserved, the methods of salvage, the specific locations for translocation, and the time frames for use of materials, etc. as appropriate.

2.1 Responsibilities

The following parties shall be responsible for implementation of this Salvage and Translocation Plan:

- The property owner (Dictionary Hill Developers, L.P.) shall ensure that all necessary funds are in place so that plan implementation is completed in an effective and timely manner. This responsibility shall transfer to any subsequent owner(s) of the REZ 08-002 project site.
- The County of San Diego Department of Planning and Land Use (DPLU) is responsible for ensuring that implementation of this plan takes place in a timely and effective manner.
- The Project Biologist (Revegetation Planner) shall be responsible for preparing and obtaining County and Wildlife Agency (if necessary) approval of this plan, for directly supervising all salvage and translocation activities, and for coordinating with the Salvage and Translocation Contractor.
- The Salvage and Translocation Contractor shall be responsible for the timely and effective salvage and translocation of all materials described in this plan and for coordinating directly with the Project Biologist.
- The Translocation Monitor shall be responsible for conducting regular inspections of the translocation site, assessing site conditions, and preparing regular biological monitoring reports. The Project Biologist may serve as the Translocation Monitor.
- The Maintenance Contractor shall be responsible for the maintenance of the translocation area for the duration of the biological monitoring period, as discussed subsequently in this report. If properly qualified, the Salvage and Translocation Contractor may serve as the Maintenance Contractor.

All members of the Salvage and Translocation Team shall be experienced in working with successful cactus salvage and translocation projects in San Diego County. This plan has been designed by Vincent N. Scheidt, Certified Revegetation Planner. See Attachment A for a list of similar, approved projects that were implemented under the direction of the Project Revegetation Planner.

2.2 Associated Mitigation Requirements

Impacts to most of the site's resident sensitive species are "covered" via habitat-based mitigation, pursuant to the County of San Diego's Biological Mitigation Ordinance (BMO). However, impacts to Coast Barrel Cactus require species-based mitigation. Therefore, one of the project's mitigation measures is that all specimens of Coast Barrel Cactus that could be affected by the project must be transplanted to the Otay Water District's San Miguel Habitat Management Area in Chula Vista (Figure 2). The Otay Water District will allow the transplantation to occur under several conditions, which the property owners have agreed to meet (Attachment B). One of these conditions is that the transplantation of the Coast Barrel Cactus specimens be subject to a County-approved Salvage and Translocation Plan with long-term monitoring and management funded by the property owners. This document fulfills a part of that requirement.

Additional required mitigation measures include the purchase of compensatory, offsite Coastal Sage Scrub habitat at a 1-to-1 ratio, the construction of a freestanding masonry screen wall for fire protection along the southern boundary of the site, and seasonal restrictions on site disturbance to prevent construction related impacts to breeding birds. These measures are unrelated to the requirements of this Salvage and Translocation Plan.

The above mitigation measures are considered adequate mitigation to compensate for project-related losses to biological resources, as defined by CEQA. It should be noted that, pursuant to a Project Issue Resolution Conference held at the County on February 18, 2010, the applicant will be completing all necessary biological mitigation prior to public review, including completion of and/or providing security for any needed transplantation, offsite habitat purchase, and mitigation monitoring. Because mitigation implementation will be part of the project design it will not need to be made a condition of project approval.

2.3 Discretionary Permit Conditions and Requirements

The County's DPLU issued a letter dated October 10, 2008 requiring that a Salvage and Translocation Plan for Coast Barrel Cactus be prepared pursuant to the "County of San Diego Report Format and Content Requirements for Revegetation Plans" (DPLU, 2007) and submitted prior to project approval. This document satisfies that requirement.

Once available, a copy of the final Resolution Form of Decision, with applicable conditions hi-lighted, will be attached to this report as an appendix (Attachment C).

2.4 Timing and Duration

The success of this Salvage and Translocation Plan is expected to take at least five years from the salvage of the

Coast Barrel Cactus specimens and their replanting at the translocation site, which will occur following approval of the REZ 08-002 project and the approval of this plan.

2.5 Costs

Table 2 provides a breakdown of anticipated costs and bonding requirements.

3. DESCRIPTION OF THE TRANSLOCATION SITE

3.1 Site Selection

As mentioned above, the salvaged Coast Barrel Cactus specimens will be translocated to the Otay Water District's San Miguel Habitat Management Area (HMA) in Chula Vista. Prior to the approval of this plan, the project biologist will identify a specific replanting area within the translocation site. A discussion of the specific features of the replanting area will then be included in this section. Figure 3 illustrates potential replanting areas within the translocation site.

3.1.1 Physical and Hydrological Factors

Portions of the San Miguel HMA are both physically and hydrologically suited to the translocation of Coast Barrel Cactus. The potential replanting areas identified (Figure 3) contain gentle slopes with suitable soils, rock outcrops, etc. The transplanted specimens shall be situated within the selected replanting area in spots that are physically and hydrologically suited to maximize the survivorship potential of this species.

3.1.2 Biological Factors

Most of the San Miguel HMA contains habitats and sensitive species that are compatible with the transplantation of Coast Barrel Cactus. The potential replanting areas identified (Figure 3) already support Coast Barrel Cactus specimens, along with other stem succulents within Diegan Coastal Sage scrub.

3.1.3 Logistical Factors

Access to the San Miguel HMA for transplanting and monitoring purposes will be provided, but the replanting area will be otherwise restricted to public access. This will maximize the survivorship potential of the transplanted Coast Barrel Cactus specimens by ensuring that they are not trampled or otherwise disturbed in the future.

3.1.4 Historical Factors

Portions of the San Miguel HMA have been used in the past as replanting areas for stem succulents, including Coast Barrel Cactus. The transplanted specimens associated with the REZ 08-002 project site shall be situated within the selected replanting area in locations that show clear evidence of suitability for this species, based on historical factors such as site disturbance, etc.

3.2 Location and Size of Translocation Site

The HMA is located within the Otay Water District's 509-acre Wastewater Reclamation Use Area on property that was annexed into the City of Chula Vista in 1999 (Figure 2). The HMA is positioned at the base of the slopes of Mother Miguel and San Miguel Mountains, approximately 1.5 miles southeast of Sweetwater Reservoir and 1.5 miles northwest of the Upper Otay Reservoir. Salt Creek Golf Club bisects the two halves of the HMA. The specific replanting area will be located at the northern end of the HMA (Figure 3)

3.3 Functions and Values

The San Miguel HMA provides wildlife functions and values that meet or exceed the needs of the specimens of Coast Barrel Cactus to be salvaged from the REZ 08-002 project site.

3.4 Present and Proposed Uses

The San Miguel HMA is conserved land that will be protected in perpetuity. No future land-use decisions that would result in impacts to Coast Barrel Cactus or any other indigenous species within the HMA may be approved, pursuant to the conservation easement recorded over this area.

3.5 Reference Site

The HMA contains two cactus transplantation areas that could serve as potential reference sites with which to compare the success of the Coast Barrel Cactus salvage and translocation effort. Coast Cholla was planted in three areas in the northern portion of the HMA between 1997 and 1998 by Merkel & Associates. And in 2006, D&D Wildlife Habitat Restoration, Inc. collected and planted approximately 250 cuttings of Coast Cholla (*Cylindropuntia prolifera*), Coast Barrel Cactus, and Coast Prickly Pear (*Opuntia littoralis*) along the western portion of the HMA and within the Native Grassland Restoration Area, which is located at the southeast corner of the HMA. As mentioned above, the Harris fire burned the majority of these areas in 2007; therefore, their recovery is still being monitored by D&D Wildlife Habitat Restoration, Inc. However, because both of these

areas involve the transplantation of cacti, they represent potential reference sites for the purposes of this Salvage and Translocation Plan.

4. IMPLEMENTATION PLAN FOR SALVAGE AND TRANSLOCATION

4.1 Rationale for Expecting Implementation Success

The criteria used in the design of this Salvage and Translocation Plan consist of standards, methodologies, and protocols that have demonstrated success at implementation for similar projects in the past. A concerted effort to identify a suitable planting location and specific planting spots, appropriate species composition in adjoining areas, and other factors has been made during the design of the Salvage and Translocation Plan. The goal of this effort has been to maximize the chances of successful salvage and translocation of the approximately 44 specimens of Coast Barrel Cactus from the REZ 08-002 project site to the translocation area. This program has been developed specifically for the REZ 08-002 project site (including the offsite fire clearing area) and the translocation area, taking into account parameters specific to each property, such as indigenous floristic composition, soil characteristics, aspect, drainage patterns, and other factors.

4.2 Financial Assurances

The current owner or subsequent owner(s) of the REZ 08-002 property shall bear the financial responsibility to fund all required transplantation activities, including site preparation, salvage, translocation, maintenance, and monitoring. A salvage and translocation agreement shall be signed and notarized by the property owner following approval of this plan and accompanied by the required security as agreed upon by the County of San Diego.

4.3 Schedule

Pending the approval of this Salvage and Translocation Plan, the translocation area shall be immediately prepared and the salvage of the Coast Barrel Cactus specimens from the REZ 08-002 property shall begin. Following the successful completion of all initial salvage and translocation activities, which shall be determined by the County of San Diego, the five year maintenance and monitoring period shall begin. The salvage and translocation program shall be deemed complete at the end of the five year maintenance and monitoring period, as determined by the County of San Diego.

4.4 Translocation Site Preparation

4.4.1 Equipment Proposed for Use during Implementation

The salvage and translocation operation shall be conducted entirely by hand. The only equipment proposed for use during the implementation of this plan shall be a small truck that will be used to transport the salvaged Coast Barrel Cactus specimens from the salvage site to the translocation site.

4.4.2 Site Accessibility

To access the salvage site, contractors will use the existing onsite dirt roads, which originate at the southern termini of Maria Avenue and La Presa Avenue, respectively. Prior to accessing the salvage site and implementation of this plan, the project biologist shall meet with the contractors, locate and flag off all specimens for salvage, and flag-off access routes so as to minimize impacts to adjacent sensitive habitats.

The specific replanting area will be located near the northern end of the San Miguel HMA and will be accessed from the south, through the Otay Water District's Salt Creek Golf Club. Restricted access roads lead to within a few hundred feet of the replanting area. Final access to the replanting area shall be on foot.

Prior to accessing the translocation site and implementation of this plan, the project biologist shall meet with the contractors and flag-off access areas so as to minimize impacts to adjacent sensitive habitats.

4.4.3 Protection of Adjacent Habitats during Salvage and Translocation

Prior to implementation of the salvage and translocation plan, the project biologist will meet with the parties responsible for salvage and translocation to present findings of this report in basic terms and explain the intent of the salvage and translocation program. A primary issue discussed at this meeting shall be efforts by all involved to avoid impacts to adjacent areas of undisturbed native vegetation, both on the salvage and translocation sites. The intent of the meeting will be to inform the attendees of the sensitivity of the habitat in these areas, and thus presumably minimize losses.

Prior to the commencement of salvage, the perimeter of the salvage area shall be staked and flagged to prevent damage to adjacent habitat. Flagging materials (lath, caution tape) shall be used to identify the appropriate work area. The same guidelines shall apply to work occurring on the translocation site. Prior to the commencement of translocation activities, the perimeter of the specific replanting area within the translocation site shall be staked and flagged to prevent damage to adjacent habitat. Flagging materials (lath, caution tape) shall be used to identify the

appropriate work area.

4.4.4 Permanent and Temporary Protection Measures

All salvage and translocation activities shall occur under the direct supervision of the project biologist. As noted above, the project biologist shall use stakes and/or flagging materials to identify the perimeters of the salvage area and the replanting area. These stakes and flagging may be used as guidelines for the placement of temporary fencing, if needed, at the edges of these areas to ensure that any adjoining sensitive habitat is not impacted by the salvage and translocation activities. If required, the project biologist shall verify in the field that this temporary fencing has been placed appropriately. The need for temporary fencing in this case is not anticipated.

Due to the small scale of the salvage and translocation effort and the fact that it will involve minimal soil disturbance, it is not anticipated that additional habitat protection measures, such as BMPs, will be needed. However, if necessary, all sensitive habitat areas adjacent to salvage and translocation activities shall be protected in accordance with any essential BMPs to reduce potential secondary impacts to sensitive habitat. However, if these measures are required, the project biologist shall:

- (1) Stake or flag the specific location of any needed temporary habitat protection fence, and/or examine and verify the correct placement of said fencing after it has been installed, but prior to the commencement of salvage and translocation activities.
- (2) Inspect stormwater management measures (BMPs) put into place as needed to ensure that all erosion control devices (straw waddles, sand bags, etc.) have been properly installed, preventing potential erosion concerns.
- (3) Document in writing that the habitat protection fence and the erosion control devices have remained in place during the planting period. Evidence of this shall be provided in a letter to the County's Landscape Architect.

Permanent, high visibility metal signs shall be placed at 200-foot intervals along all segments of the replanting area. These signs shall read:

Sensitive Environmental Resources
Disturbance Beyond this Point is Restricted

Information:

Contact County of San Diego, Department of Planning and Land Use

Ref: REZ 08-002

4.4.5 Proposed Timing of Salvage

The salvage of specimens shall be generally restricted to the cooler fall/winter months of each year, herein defined as being the period between October 1 and February 1. This period may be extended if winter rainfall events are delayed. Specimens shall be removed only during this period to maximize survivorship potential. No salvage activities will be allowed to occur during the California Gnatcatcher breeding season (March 1 to August 15).

4.4.6 Salvage of Specimens

Prior to the initiation of any clearing, grading, grubbing, or other site development activities, the project biologist shall survey the entire property, including the offsite fire clearing area, to carefully locate all affected specimens of Coast Barrel Cactus. The precise number of specimens intended for salvage and translocation shall be documented by the project biologist prior to any site work, and all Coast Barrel Cactus specimens shall be flagged or marked with stakes so that none are missed in the salvage effort. If possible, the salvage and translocation effort will include the collection of Coast Barrel Cactus seeds from the project site and the planting of these seeds at the translocation site to ensure that the applicable success criteria are met (see page 17).

All salvage activities shall be conducted under the direct, full-time field supervision of the project biologist. Each Coast Barrel Cactus specimen will be carefully dug from the ground using hand tools. Great care will be taken to retain as much soil around the root-ball as is possible. Immediately following removal, the specimens will be placed in plastic buckets, trays, or on plastic sheeting for immediate transportation to the translocation site. If Coast Barrel Cactus seeds are available at the time that the salvage effort is conducted, they shall be collected by hand for planting on the translocation site.

The stockpiling or storage of specimens is generally not appropriate and will not be necessary in this specific case. Because a translocation site has already been identified and a specific replanting area will be delineated prior to salvage, the translocation shall be conducted immediately after salvage. Because of the limited numbers of specimens to be salvaged, all fieldwork shall be completed in one single effort. Once salvage is complete, the materials will be immediately transported to the replanting area for same-day translocation. All salvage and translocation activities must be completed prior to initiating any site clearing, grubbing, or grading activities.

4.5 Planting Plan

4.5.1 Location and Identification of Specific Planting Locations

As discussed above, the salvaged Coast Barrel Cactus specimens will be translocated to the Otay Water District's

San Miguel Habitat Management Area in Chula Vista. Prior to the removal of any specimens, the specific replanting area within the translocation site will be identified, marked, and prepared for the translocation effort. Figure 3 illustrates potential replanting areas within the translocation site. The location of each planting hole within the replanting area will be selected by the project biologist and marked in the field with flagging or stakes. The conditions at each specific planting hole shall match, to the maximum extent possible, the conditions where the salvaged specimens presently grow. For example, the project biologist shall match, as closely as possible, the slope, aspect, drainage patterns, amount of exposure, etc. at each specific planting hole.

4.5.2 Translocation of Specimens

The project biologist shall thoroughly photo-document the specific replanting area at the translocation site prior to ground disturbance. Preparation of the replanting area will include the manual removal (to ground level) of any weeds found in close proximity to the planting holes. Efforts will be made to minimize soil surface disturbances. This will preclude chances for erosion or other drainage-related problems. Each planting hole will be hand dug using manual tools immediately prior to its use. Excess soil removed from the planting holes will be placed in five-gallon buckets for removal from the translocation site. Watering of the planting holes will occur at the discretion of the supervising biologist, and only at the time of initial planting or as deemed necessary. No soil amendments, fertilizers, etc. will be added to the planting holes or substrate. Only indigenous soil as removed from the planting hole will be used to "pack" the root system within the planting hole. Great care shall be taken by all involved to prevent the trampling of adjacent vegetation. This will protect the habitat value of this area and minimize the "visual profile" of the replanted specimens. Following replanting, there should be little evidence that disturbance has taken place within the translocation site. Any Coast Barrel Cactus seeds that had been collected at the time of specimen salvage shall be hand planted adjacent to the transplanted specimens at the time of translocation.

Upon completion of the salvage and translocation of all specimens, the biologist shall provide evidence in writing that the salvage work is complete and that all Coast Barrel Cactus specimens have been relocated to areas out of harm's way.

4.6 Irrigation

Irrigation of the specimens will be strictly prohibited in order to minimize chances for weed infestations and related problems. The only exception to this will be prewatering of the planting holes that may be allowed at the discretion of the project biologist.

5. MAINTENANCE DURING MONITORING

5.1 Maintenance Activities

5.1.1 Maintenance and Weeding

The weeding of non-native annual forbs and grasses shall occur on an “as needed” basis throughout the five-year maintenance and monitoring period. The translocation monitor, in coordination with the maintenance contractor, shall define the need for weeding and a weeding schedule. At a minimum, four weeding visits shall be conducted each year of the five-year period, with one of these visits occurring in the spring and one occurring in the summer, to adequately control exotics. The actual weeding schedule shall be flexible and based on precipitation, weed recruitment, and other factors.

Dictionary Hill Developers, L.P. shall be responsible for the manual removal of any perennial exotics that become established in the replanting area, including (but not limited to), Giant Wild Reed (*Arundo donax*), Castor Bean (*Ricinus communis*), Salt Cedar (*Tamarix* sp.), Mexican Fan Palm (*Washingtonia robusta*), Pampas Grass (*Cortaderia* sp.), Brazilian Peppertree (*Schinus terebinthifolius*), seedling *Eucalyptus*, *Acacia*, and others. Removal of exotics shall occur under the direction of the translocation monitor.

The use of control agents such as herbicides will be avoided. Any use that may become necessary will occur under the direction of the translocation monitor.

5.1.2 Pruning

The pruning or removal of the native species that become established in the replanting area as a result of recruitment from the surrounding area shall not be permitted under any circumstances, unless determined by the translocation monitor to be absolutely necessary for the establishment of the replanted specimens. Any necessary pruning or removal of native species will be biologically monitored.

5.1.3 Trash and Debris Removal

Removal of all trash and litter will occur on a regular basis. This shall include the clearing of all surface debris prior to planting. All planting debris (containers, trash, etc.) shall be removed from the site immediately after use. No trash or other materials not specifically related to the salvage and translocation effort may be stored or placed in the replanting area or on the translocation site.

5.1.4 Pest Control

Control of pests, such as insects, ground squirrels, gophers, etc., will not take place unless specified by the translocation monitor. The need for active pest control is not anticipated although, if necessary, minimally invasive techniques (such as trapping, etc) may be utilized. The use of pesticides will be avoided to the maximum extent feasible.

5.2 Maintenance Schedule

Maintenance of the transplanting site shall be completed on an “as needed” basis, as specified by the translocation monitor. Little to no maintenance is anticipated.

6. MONITORING PLAN FOR TRANSLOCATION SITE

6.1 Performance Standards for Target Dates and Success Criteria

In order to establish the success of the Coast Barrel Cactus salvage and translocation effort, a total count of salvaged and translocated specimens shall be recorded at the end of the initial salvage period. An annual percentage of surviving specimens shall be generated by comparing the original number of salvaged plants with the total number of surviving specimens at the end of each year (including specimens that have germinated from seed, if applicable). Survivorship of the salvaged and translocated specimens at the end of the first year of biological monitoring shall be at least 90 percent. Survivorship at the end of the 2nd, 3rd, 4th, and 5th years of monitoring shall be at least 80 percent.

Should the above survivorship percentages not be generally met at the end of each monitoring year, additional Coast Barrel Cactus specimens will be planted to compensate for all specimens lost, up to the required percentage of the original planting. In addition, a program for adaptive management and remedial actions shall be put into place to address identifiable problems in the replanting area or the failure of the salvage and translocation program to meet success goals. See section 8 of this report.

Non-native cover shall be maintained to match the ambient non-native cover in the parts of the translocation site immediately adjacent to the replanting area. This percentage of non-native cover shall be measured at the time of planting. As describe in section 5.1.1, noxious invasive exotics will be maintained at a 0% cover within the replanting area.

6.2 Monitoring Methods

A biological monitoring program will be implemented to document the growth and development of the salvaged and translocated specimens. The monitoring program will address the progress of the salvage and translocation effort through a five-year study and analysis of the growth, vigor, and integration of the salvaged specimens within the replanting area. Both qualitative and quantitative documentation are recommended. The program will determine the need for remedial activities throughout the duration of the monitoring effort. Color photographs of the translocation site showing overviews of the replanting area, as well as typical translocated specimens in situ, shall be assembled to document the success of the transplantation effort. Photo-documentation shall be initiated before any salvage or translocation of plants takes place, and permanent photo-documentation points shall be established by the end of the first year of biological monitoring.

6.3 Monitoring Schedule

Biological monitoring will begin shortly before the beginning of the salvage and translocation effort with the identification of a specific replanting area within the translocation site, the selection of locations for planting holes, a count of all of the Coast Barrel Cactus specimens present on the project site, and the demarcation of each of these specimens for the salvage effort. It will terminate at the end of a five year period. This five year period will begin at the successful completion of all initial salvage and translocation activities, as determined by the County's DPLU. If success criteria have not been achieved by the end of the five year maintenance and monitoring period, it may be necessary to extend this period. Monitoring inspections will be conducted four times during the first year following implementation, twice during the second and third years, and annually during the fourth and fifth years.

6.4 Monitoring Reports

Letter-format reports summarizing the monitoring program and success of the salvage and translocation effort will be submitted to the County's DPLU as follows:

Year 1: Year-End Report

Year 2: Annual

Year 3: Annual

Year 4: Annual

Year 5: Annual

Each report shall include a qualitative and quantitative analysis of the growth, vigor, and integration of the salvaged specimens within the replanting area. Monitoring and maintenance field data shall be included as an

addendum to each report. Site photographs shall be provided as part of the monitoring reporting effort. The data that are compiled will clearly depict the replanting area and typical translocated specimens.

Reports shall be submitted to the County no later than the first week of January. Any significant issue or contingency that arises on the translocation site (e.g. plant survival issues, fire, or flooding) shall be reported in writing to the County of San Diego within two weeks from the date of the incident. Accompanying the report shall be a plan for remediation, with an implementation schedule and a monitoring schedule.

7. COMPLETION OF SALVAGE AND TRANSLOCATION PROGRAM

At the end of the five year maintenance and monitoring period, the County shall be provided with written Notification of Completion. The County shall make the final determination of the successful completion of all salvage and translocation activities. Wildlife Agency confirmation will be provided as a part of this completion process.

8. CONTINGENCY MEASURES

8.1 Initiating Contingency Procedures

8.1.1 Contingency Circumstances

Should the salvage and translocation program not meet anticipated qualitative and quantitative goals (section 6.1), contingency measures shall be initiated to bring the salvage and translocation program back to its target state.

8.1.2 Replacement Planting

Any dead or diseased translocated specimens will be removed and new replacement specimens will be planted to meet the goals of this plan. The need for replacement plantings, size of replacement specimens, timing of replanting, etc. will be determined by the translocation monitor. The first priority source of replacement specimens shall be from specimens (seed-grown or salvaged) occurring within a five-mile radius of the salvage site. The source of replacement plantings shall be determined by the project biologist in coordination with the maintenance contractor and the County's DPLU. Commercially-grown specimens may be substantially different in terms of genetic composition; hence, these are not acceptable and may not be used.

8.2 Alternative Locations for Contingency Mitigation

If the above survivorship percentages are still not met after the additional stock is planted, the project applicant must notify the County and Wildlife Agencies to determine the best remediation plan. This could include, but is not limited to, purchase of additional offsite mitigation land that supports an agreed-upon number of Coast Barrel Cactus specimens. This contingency mitigation location would need to be identified by a County-approved Revegetation Planner or Biological Consultant working in concert with County staff. The securement and perpetual protection of the contingency mitigation site would need to be ensured via the dedication of a biological open space easement or conservation easement over that land.

8.3 Funding

Dictionary Hill Developers, L.P. shall be responsible for funding contingency mitigation associated with the REZ 08-002 salvage and translocation program. This responsibility shall transfer to any subsequent owner(s) of the REZ 08-002 project site.

Table 1. Bonding Cost Estimate¹ – REZ 08-002
Salvage and Translocation Plan Implementation, Maintenance, and Monitoring

I. Tasks Related to Project Implementation – first 90 days

(1) Field supervision of salvage:	
(a) Locating and flagging of all specimens prior to salvage	\$1,320
(d) Field supervision of salvage operations	\$990
(2) Translocation site preparation (earthwork, BMPs, etc.).....	none
(3) Temporary fencing of translocation area	n/a
(4) Field supervision of specimen replanting:	
(a) Inspection and field spotting of the salvaged plants prior to replanting	\$1,320
(b) Field supervision of planting	\$665
(c) Post-planting review and photodocumentation	\$1,320
(5) Various initial follow-up site reviews and 1st report at 90 days	\$4,950
Total costs: initial revegetation plan implementation and monitoring	\$10,565

II. Tasks Related to Long-term Monitoring and Reporting:

(6) <u>Conduct detailed biological field monitoring of translocated specimens for five years</u>	
<u>following initial planting:</u>	
(a) year one (four surveys)	\$5,280
(b) year two (two surveys)	\$2,772
(c) year three (two surveys)	\$2,911
(d) year four (one survey)	\$1,952
(e) year five (one survey)	\$2,050
(7) <u>Prepare technical reports and submit to County and Wildlife Agencies annually for five years:</u>	
(a) year one (year-end report)	\$1,980
(b) year two (annual report)	\$2,079
(c) year three (annual report)	\$2,183
(d) year four (annual report)	\$2,292
(e) year five (annual report)	\$2,407
(8) <u>Maintenance/weeding of the translocation area by a qualified landscape contractor</u>	
(a) \$300 per year annual cost, amortized	\$1,500
(9) <u>Review and approval of annual reports by DPLU</u>	
(a) \$200 per year annual cost, amortized	\$1,000
(10) <u>Contingency (10%)</u>	\$2,840
Total costs: 5-year biological maintenance and monitoring	\$31,246

TOTAL - DIRECT COSTS **\$41,811**

3% PER YEAR CPI RATE, FIVE YEARS..... **\$6,272**

GRAND TOTAL **\$48,081**

CASH DEPOSIT (10%) **\$4,808**

*Prepared by Vincent N. Scheidt, Revegetation Planner
May 2010*

¹ - This is an estimate for bonding purposes only. ACTUAL COSTS WILL VARY SIGNIFICANTLY

CERTIFICATION

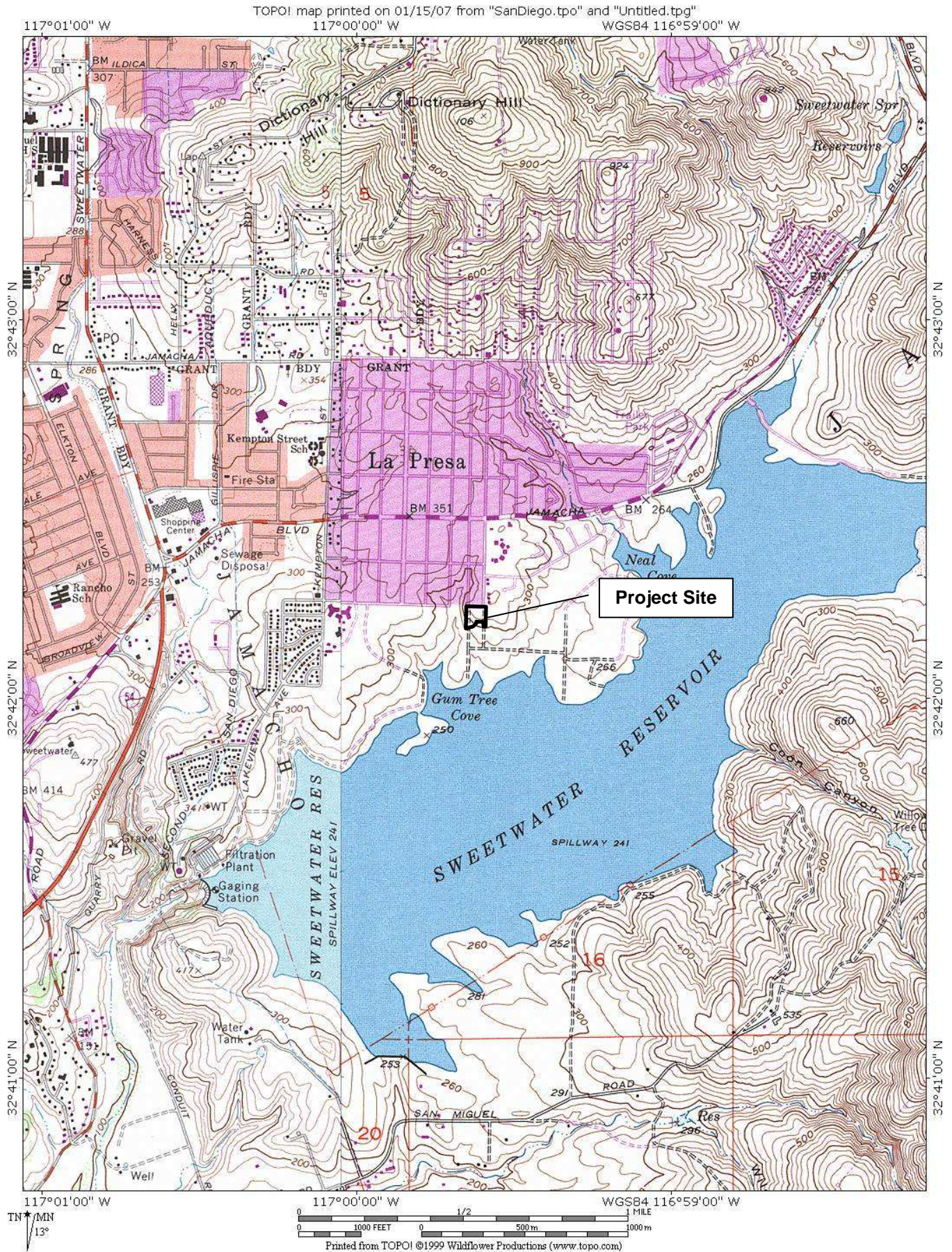
I hereby certify that the information contained in this document is complete and accurate to the best of my knowledge as of May 14, 2010.

A handwritten signature in black ink, appearing to read 'V. Scheidt', is written above a horizontal line.

Vincent N. Scheidt, MA

Certified Revegetation Planner

Figure 1. Regional Location – REZ 08-002
Portion of U.S.G.S. “Jamul Mountains, California” 7.5' Quadrangle



**Figure 2. Regional Location –San Miguel Habitat Management Area
Portion of U.S.G.S. “Jamul Mountains, California” 7.5' Quadrangle**

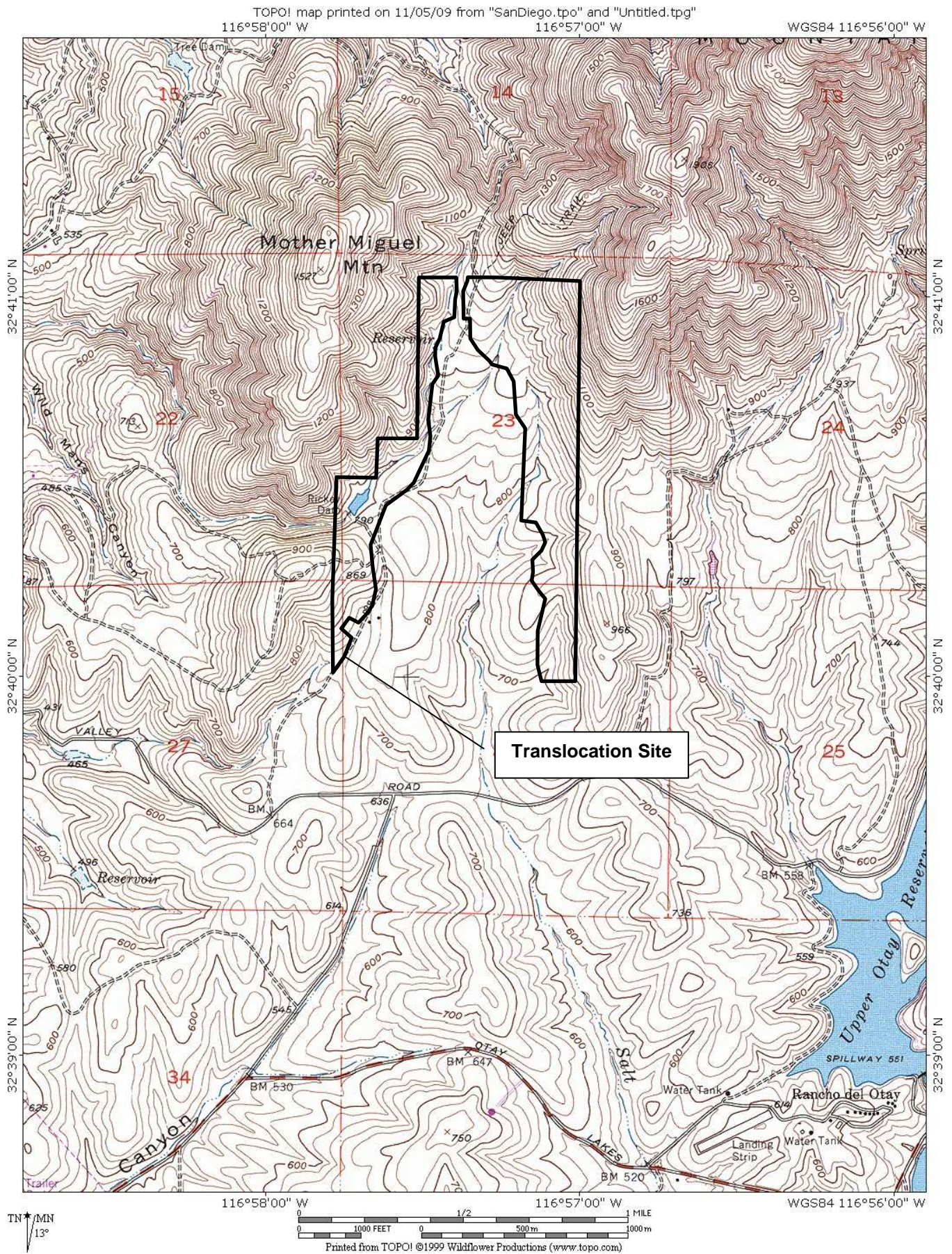
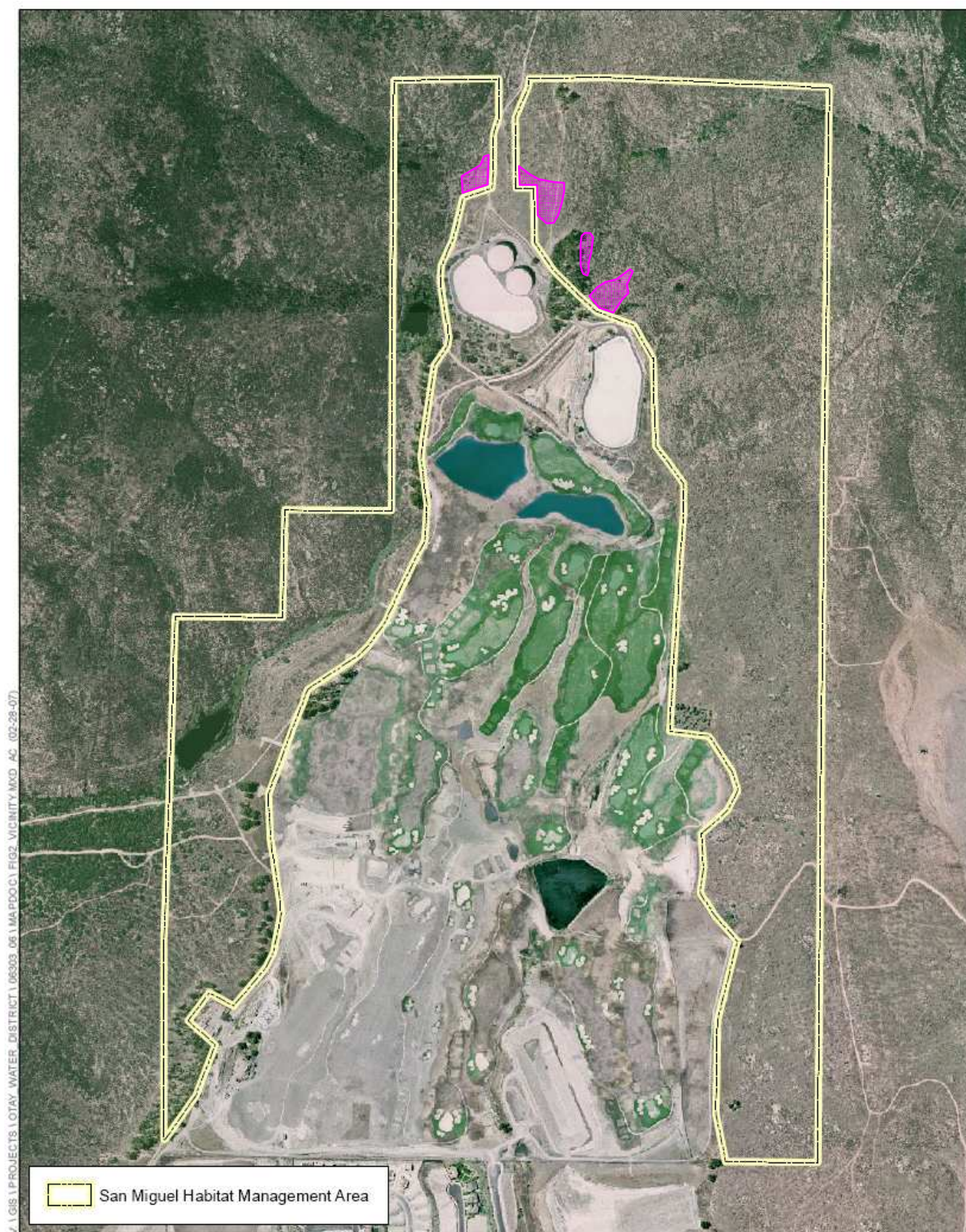
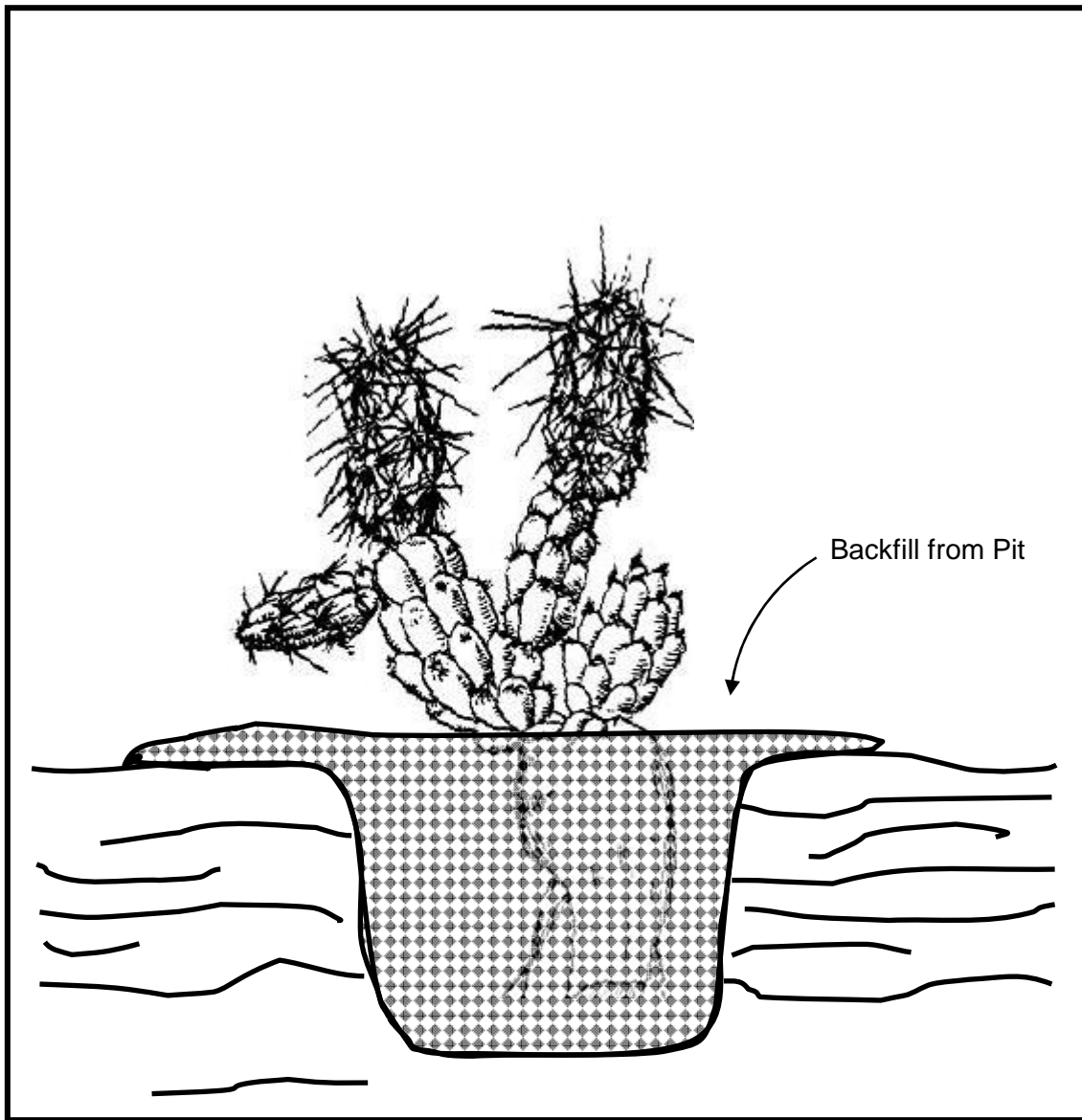


Figure 3. Aerial Showing Potential Replanting Areas within the Translocation Site (Pink polygons)



SOURCE: NAIP Imagery (2005), AMEC

Figure 4. Typical Planting Profile – Stem Succulent



ATTACHMENT A

PLAN PREPARER QUALIFICATIONS

SAMPLE REVEGETATION PROJECTS - DESIGN, IMPLEMENTATION, AND MONITORING

Project - Carmel Valley Riparian Enhancement Plan

Year - 1989

Contact / Jurisdiction - Bruce McIntyre, LMA / City of San Diego

Responsibilities - Riparian Wetland Revegetation Plan preparation

Project - Point Loma Forced Main Sludge Line Habitat Restoration Plan

Year - 1990

Contact / Jurisdiction - Jack Nakawatase / City of San Diego

Responsibilities - Final Coastal Sage Scrub and Maritime Succulent Scrub Revegetation Plan preparation, implementation, and 5-year monitoring

Project - La Honda Road Widening Project

Year - 1991

Contact / Jurisdiction - Darrell Daugherty / City of Escondido

Responsibilities - Riparian Revegetation Plan preparation

Project - San Luis Rey Valley United Methodist Church Revegetation Plan

Year - 1992

Contact / Jurisdiction - Morgan Brainerd / City of Oceanside

Responsibilities - Willow Woodland Restoration Plan preparation, implementation, and 3-year monitoring

Project - Dictionary Village San Diego Barrel Cactus Transplantation Plan

Year - 1993

Contact / Jurisdiction - Tom Olson / County of San Diego

Responsibilities - Cactus Transplantation Plan preparation, implementation, and 5-year monitoring

Project - Buena Creek HOA Wetland Restoration Plan

Year - 1997

Contact / Jurisdiction - Craig Lorenz / County of San Diego

Responsibilities - Oak Woodland Restoration Plan preparation and implementation

Project - Tecalote Oaks Woodland Restoration Plan

Year - 1997

Contact / Jurisdiction - Bill Kidoo / County of San Diego

Responsibilities - Oak Woodland Restoration Plan preparation and implementation

Project - Mahogany Ranch Revegetation Plan

Year - 1998

Contact / Jurisdiction - Ward Benshoof / County of San Diego

Responsibilities - Oak Woodland Restoration Plan preparation

Project - Paradise Valley Road Revegetation Plan

Year - 2002

Contact / Jurisdiction - Dennis Ferdig / County of San Diego

Responsibilities - Coastal Sage Scrub Restoration Plan preparation

Project - El Dorado Ridge Cactus and Succulent Transplantation Plan

Year - 2008

Contact / Jurisdiction - Michael Grant / City of Chula Vista

Responsibilities - Cactus and Succulent Transplantation Plan preparation

ATTACHMENT B

BIOLOGICAL RESOURCES REPORT FOR REZ 08-002

(to be included when final iteration is available)

ATTACHMENT C

FINAL RESOLUTION FORM OF DECISION

(to be included when available)